Results of Testing

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
4-Nitrophenol	100-02-7	HESTOX Subchronic oral toxicicty	40 CFR 798.2675	rat	oral (gavage), 1/d for 13 wk	0, 25, 70, 140 mg/kg/day	20/sex/group	Administration of the test substance at 70 mg/kg resulted in increased mortality (1 male, 1 female) and at 140 mg/kg (15 males, 6 females) which appeared to be related to an acute pharmacologic/toxicologic effect exacerbated by repeated dosing. Clinical signs preceding death were pale appearance, languid behavior, prostration, wheezing and dyspnea. No other treatment specific organ pathology, clinical pathology or other effects were noted in the parameters evaluated. The no-effect level was considered to be 25 mg/kg/day.	OTS0526338
Malonitrile	109-77-3	EFTSPT Soil and sediment adsorption isotherm	40 CFR 796.2750	Not applicable	Not specified	Not specified	Not applicable	Due to the instability of ^{14}C-malononitrile in sterile deionized water and the ability to obtain repurified C14-malononitrile by preparative TLC, it was determined that the test compound decomposes too rapidly to successfully conduct an adsorption-desorption test.	OTS0534219
Malonitrile	109-77-3	HESTOX Subchronic oral toxicicty	40 CFR 798.2675	rat	oral (gavage), 1/d for 90 days	0, 0.4, 2, 10 mg/kg/day	10/sex/group	No significant clinical findings were reported during treatment. There was no treatment related mortality. Occasional salivation was observed in high-dose rats prior to dosing. Body weight of high-dose males at 13 weeks was 6% lower than that of controls. Food consumption was not affected by treatment, but food conversion efficiency was lower in high-dose males as compared to controls. Ophthalmology findings were unremarkable. Significant changes in hematology and clinical chemistry parameters were reported at mid- and high dose levels. These changes were not observed after the recovery period. Absolute and relative liver weight were significantly increased in high-dose groups. This effect was partially reversed by the recovery period. There were no macroscopic findings that suggested gross target organ toxicity attributed to treatment. Hepatocellular hypertrophy was observed in mid- and high-dose males. This was no longer present after the recovery period.	55 FR 357; 1/4/90 OTS0526378
Bis(2-chloroethoxy) methane	111-91-1	EFADEGHYDR Hydrolysis study	40 CFR 796.3500	Not applicable	aqueous at pH 3.00, 7.06, 11.10, 25 °C, up to 32 days	Not specified	Not applicable	No significant hydrolysis was noted at any pH level. A lower limit of half-life was estimated to be at least 2 years at all pH levels. An upper limit could not be estimated.	54 FR 7093; 2/16/89 OTS0526369

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Bis(2-chloroethoxy) methane	111-91-1	HESTOX Subchronic oral toxicity	40 CFR 798.2675	rats	oral (gavage), 90 days	0, 10, 20, 40, 80, 120 mg/kg/day	10/sex	Lethality was observed at 80 mg/kg/day and higher. Dose-related effects included decreased body weight (males at 80 mg/kg/day and higher), decreased food intake in high-dose males, histopathological lesions or liver and kidney of males at 20 mg/kg/day, and lesions in the heart, thymus, spleen, bone marrow, brain, and spinal cord at 120 mg/kg/day. The no-adverse effect level was 10 mg/kg/day.	55 FR 13956; 4/13/90 OTS0526337
4-Chlorobenzotri-chloride	5216-25-1	HESTOX Subchronic toxicity range-finding study	Non-TSCA Protocol/Guideline	rats	oral (gavage), 2 wks	0, 1.25, 12.5, 25, 75, 150, 350 mg/kg/day	6/sex	Occasional fecal stain and rough coat were seen at 12.5 mg/kg/day. At 25 mg/kg/day and higher, decreased food consumption, decreased weight gain, body weight loss, gastrointestinal disturbance, dehydration, breathing difficulties, ataxia, and tremors were noted. Mortality occurred at 150 mg/kg/day and higher. No adverse effects were noted at 1.25 mg/kg/day.	54 FR 33772; 8/16/89 OTS0526376
4-Chlorobenzotri-chloride	5216-25-1	HESTOX Subchronic oral toxicity	40 CFR 798.2650	rats	oral (gavage), 90 days	0, 1.25, 12.5, 25.0 mg/kg/day	10/sex	No mortalities occurred. Decreased weight gain (both sexes at mid- and high-dose) salivation and urine stain (mid-and high-dose males; high-dose females), hematology effects at mid-dose, and lesions of testes (mid- and high-dose) and livers (high-dose females). No effects were seen at 1.25 mg/kg/day.	54 FR 33772; 8/16/89 OTS0526376
Methyl chloride	74-87-3	EFADEGHYDR Hydrolysis study	40 CFR 798.3500	Not applicable	25 °C; pH 3, 7, 11	Not specified	Not applicable	The measured rate constants indicate that hydrolysis of methyl chloride under mildly acidic and neutral conditions is essentially negligible. Under basic conditions at pH = 11, hydrolysis apparently takes place - albeit at a slow rate - yielding methanol as a transformation product. Based on hydrolysis characteristics alone, methyl chloride would be expected to persist within normal pH regimes in the aquatic environment.	54 FR 33772; 8/16/89 OTS526375
Dibromomethane	74-95-3	EFADEGHYDR Hydrolysis study	40 CFR 798.3500	Not applicable	25 °C; pH 3, 7, 11	Not specified	Not applicable	Dibromomethane was found to be hydrolytically stable at pH 3 and pH 7. However, moderate degradation was observed at pH 11.	54 FR 30460; 7/20/89 OTS0526374
Dibromoethane	74-95-3	EFADEGHYDR Hydrolysis study	40 CFR 798.3500	Not applicable	25 °C ; pH 3, 7, 11	150 ppm	Not applicable	No significant change in dibromomethane concentration was found up to 30-days.	54 FR 7093; 2/16/89 OTS0526368
Bromoform	75-25-2	EFADEGHYDR Hydrolysis study	40 CFR 798.3500	Not applicable	25 °C ; pH 5, 7, 9; 672 hr	100 ppm	Not applicable	There was no hydrolytic products formed at a level >10% at any point during the course of the study. The level of inorganic bromide stayed below 0.6 ppm throughout the study. The pH stayed within +/- 0.05 units throughout the test period. The hydrolysis rate for pH 5 is 0.0023 µmole/liter/day and the half-life is 301 days. Bromoform is persistent with respect to hydrolysis for pH 7 and pH 9.	Study date 3/31/89; Docket# OPTS-42088D

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
1,1-Dichloroethane	75-34-3	EFADEGHYDR Hydrolysis study	40 CFR 798.3500	Not applicable	pH 4, 7, 11	1 mM/L	Not applicable	The test substance was determined to have hydrolytic rate constants of k_A = 3.07 x 10-1; k_B = -4.74 x 10^{-1}; and k_N = 1.89 x 10^{-3}.	OTS0526324
Pentachloroethane	76-01-7	EFADEGHYDR Hydrolysis study	40 CFR 798.3500	Not applicable	pH 4, 7, 11	0.02 mM/L	Not applicable	The test substance was determined to have a very rapid hydrolysis rate at pH 11 (unable to determine hydrolysis rate) and had a half-life of less than 1 minute. The rate constants at pH 7 was determined to be 2.8 x 10^{-2} 1/hr with a half-life of 30.4 hours. At pH 3, the compound appeared virtually unchanged after 334 hours. Tetrachloroethane was identified as the primary decomposition product.	OTS0526324
Dihydrosafrole	94-58-6	EFADEGHYDR Hydrolysis study	40 CFR 798.3500	Not applicable	25 °C; pH 3, 7, 11	Not specified	Not applicable	There was no evidence for the formation of degradation products appearing in chromatograms obtained from the HPLC analyses. No evidence for hydrolysis was detected at any of the pHs tested. Dihydrosafrole appeared hydrolytically stable under the conditions maintained during this study.	54 FR 30460; 7/20/89 OTS0526373
2,4-Dichloro-phenoxyacetic acid	94-75-7	EFADEGHYDR Hydrolysis study	40 CFR 798.3500	Not applicable	25 °C; pH 3, 7, 11	21 ppm	Not applicable	2,4-D is very stable to hydrolysis at pHs 3, 7 and 11 over a 30-day period. All radioactivity detected during the study at all pHs was identified as 2,4-D only.	54 FR 7093; 2/16/89 OTS0526370
1,2-Dichloro-benzene	95-50-1	EFADEGHYDR Hydrolysis study	40 CFR 798.3500	Not applicable	pH 3, 7, 11	3.9 mg (nominal)	Not applicable	The test substance was determined to have hydrolytic rate constants of 0.0195, 0.0196, and 0.0153 1/d and half lives of 35.5, 35.4, and 45.4 days for pH 3, 7, and 11, respectively.	OTS0526333
1,2,4,5-Tetrachloro-benzene	95-94-3	EFADEGHYDR Hydrolysis study	40 CFR 798.3500	Not applicable	pH 3, 7, 11	592 ug/L (nominal)	Not applicable	The test substance was determined to have hydrolytic rate constants of 0.0157, 0.0142, and 0.0165 1/d and half lives of 44.2, 48.9, and 42.1 days for pH 3, 7, and 11, respectively.	OTS0526333
1,3-Dichloro-propanol	96-23-1	EFTSPT Soil and sediment adsorption isotherm	40 CFR 796.2750	Not applicable	Not specified	0.01 M $Ca(NO_3)_2$	Not applicable	The purity of the test substance was 95.3% at initiation and was relatively stable through the adsorption phase with an average of 95.7%, 90.1% and 94.0% for silt loam, clay loam and sandy loam, respectively. Degradation of the test substance was more significant on the soils. Soil extracts analyzed showed 94.5%, 77.0%, and 87.1% for silt loam, clay loam and sandy loam, respectively. The equilibrium pH range was 6.90 to 7.15. The mean C-14-mass balance was 102%, 101% and 96.6% for silt loam, clay loam and sandy loam, respectively. The correlation coefficients obtained for the determined isotherms ranged from 0.8724 to 0.9383 (Freundlich model).	54 FR 30460; 7/20/89 OTS0526372

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
1,3-Dichloro-propanol	96-23-1	HESTOX Subchronic oral toxicity	40 CFR 798.2650	rats	oral (gavage), 5 d/wk; 13 wks	0, 0.1, 1, 10, 100 mg/kg bw/day	10/sex	No adverse effect level = 1 mg/kg/day. Dose related effects at 10 mg/kg/day and higher included increased liver weights in both sexes, histopathologic changes in stomach, kidneys, and liver in males. High-dose rats also showed decreased feed consumption, red blood cell count, hemoglobin, increased total proteins, and nasal lesions.	54 FR 48153; 11/21/89 OTS0526377
Ethyl methacrylate	97-63-2	EFADEGHYDR Hydrolysis study	40 CFR 798.3500	Not applicable	25 °C; pH 3, 7, 11	10 µg/mL (ppm)	Not applicable	The measured half-life for ^{14}C-ethyl methacrylate is 410 minutes at pH 11. Since less than 1% hydrolysis occurred at pH 3 or 7 over 28 days, the approximate half-lives calculated from the initial and final concentrations were 4.8 x 103 days at pH 3 and 2.4 x 103 days at pH 7.	54 FR 11273; 3/17/89 OTS0526371